

## Notes on the Trigonoderus-group (Hym., Chalcidoidea)

By KARL-JOHAN HEDQVIST

In 1957 KERRICH and GRAHAM treated the *Trigonoderus*-group as belonging to *Cleonymidae*, mostly perhaps for practical reasons. All older authors have placed this group in *Cleonymidae* owing to the elongated pronotum. PECK et al. (1964) created a tribe for the *Trigonoderus*-group, *Trigonoderini*, and I think it is best to hold this tribe separate from *Cleonyminae* until we know more about *Pteromalidae*.

### *Trigonoderini* Peck et al.

Medium to large, elongate species with large head. Eyes large and sometimes bulging. Mandibles have the formula (left+right) 3+4 and 4+4. Antennae, 11263, inserted a little above a level with anterior margin of eyes. Clypeus edentate or dentate. Malar space short (except in *Eutelisca* gen.n.). Pronotum more or less elongate. Notauli complete. Prepectus large, reticulated (in *Eutelisca* striato-reticulate), sometimes divided posterior by a carina. Scutellum with a frenal furrow. Propodeum of medium size to large with a median carina or a furrow, sometimes with a more or less complete plica. Petiole short. Gaster elongate, acuminate, sometimes with a stylus shaped apex, tergites (1st—3rd) with sinuate or straight posterior margin. Hind tibia with two spurs (in *Eutelisca* one). Fore wing with or without speculum, marginal and postmarginal vein long, stigmal vein of moderate length, fore wing sometimes with macula.

Our knowledge about the hosts is very poor. Only very few species have been reared so that we safely know the host. Presumably are all species parasites of *Coleoptera* feeding in living or dead trees, under bark and in large tree fungi (*Polyporus*).

11 genera are known and two are described here as new. Most of the species are known from the Holarctic region.

### Key to the genera of the tribe *Trigonoderini*

1. Frenal furrow in normal position (fig. 2 B) ..... 2.
- . Frenal furrow not in normal position (fig. 1 B) ..... *Platygerrhus* Thoms.
2. Clypeus with anterior margin edentate ..... 6.
- . Clypeus with anterior margin dentate ..... 3.
3. Propodeum with a median sulcus ..... *Trigonoderoides* Kam.
- . Propodeum with a median carina (sometimes weak) ..... 4.

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4. Prepectus with a delimited area (fig. 4 C) ..... 5.
- Prepectus without any delimited area (fig. 3 B) ..... *Eutelisca* gen.n.
5. Fore wing with a fully developed speculum. Collar more or less separated.  
Male with erect hairs on funicle joints (fig. 4 E) ..... *Plutothrix* Först.
- Fore wing with very reduced or undeveloped speculum. Collar not separated.  
Male with no erect hairs on funicle joints (fig. 6 E) ..... *Trigonoderus* Westw.
6. Propodeum with a median carina ..... 7.
- Propodeum with a median sulcus ..... *Glyptosticha* Masi
7. Prepectus with regular punctuation without any delimited area ..... 8.
- Prepectus with a delimited triangular area before tegula .. *Ogloblinisca* gen.n.
8. Clypeus strongly incised in the middle of the anterior margin .. *Erdoesia* Bouč.
- Clypeus truncate or very little sinuate ..... 9.
9. Pronotum short wider than long. Gaster with very short petiole. Male without rugose sculpture on funicle joints ..... *Janssoniella* Kerr.
- Pronotum elongate clearly longer than wide. Petiole long not transverse. Male with rugose sculpture on funicle joints (fig. 15 D) ..... 10.
10. Mandibles with left 3 and right 4 teeth. The tergites (1st—3rd) of gaster not sinuated or incised ..... *Gastracanthus* Westw.
- Mandibles with left 4 and right 4 teeth. The tergites (1st—3rd) of gaster with posterior margin emarginate. Male with first joint of clava free *Hebestephus* Kam.

*Platygerrhus* Thoms.

Thomson, Hym. Scand. vol. 5, p. 13, 1878.

Synonyms: see Kerrich & Graham (1957).

Type: *Platygerrhus gracilis* Thoms.=*Trigonoderus ductilis* Walk.

In Europe 4 species, in North America 2 species (1 species new), and in the Australian region 7 species (it is dubious if they belong to *Platygerrhus*).

Key to the species from the Holarctic region

1. Fore wings under the stigmal vein with a macula ..... *Platygerrhus maculatus* Erd.+*Pl. algonquinia* (Girlt.)
- Fore wings hyaline ..... 2.
2. Scutellum with very fine reticulation (fig. 1 I) ..... 3.
- Scutellum with normal reticulation (fig. 1 G) ..... *Pl. ductilis* (Walk.)
3. Basal cell with only a singel row (fig. 1 F) of hairs. Basal part of wings brownish ..... *Pl. americanus* sp.n.
- Basal cell with a double row (fig. 1 H) of hairs or more. Basal part of wings complete hyaline ..... *Pl. dolosus* (Walk.)

*Platygerrhus maculatus* Erd.

Erdős, Ann. Hist.-Nat. Mus. Nationalis Hungarici VIII, pp. 362—363, 1957.

Distribution: Hungary and Polen.

Host: Unknown.

*Platygerrhus algonquinia* (Girlt.)

Girault (*Trigonoderus algonquinia*), Ent. News. 28, pp. 396—397, 1917.

Distribution: U.S.A. (Connecticut).

Host: reared from *Ulmus*.

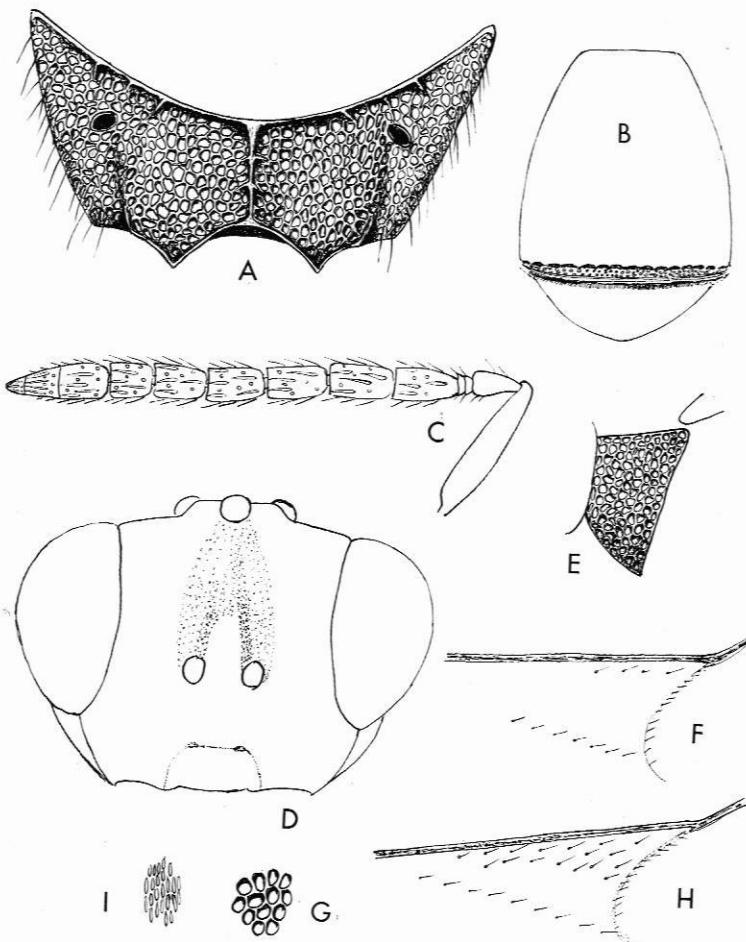


Fig. 1, A—G. *Platygerrhus ductilis* (Walk.), A. Propodeum, B. Scutellum (frenal furrow not in normal position), C. Antenna, D. Head in frontal view, E. Prepectus, F. Basal cell, G. The puncturation of scutellum, H—I. *Pl. dolosus* (Walk.), H. Basal cell and I. The puncturation of scutellum.

This species seems to be very similar to *Pl. maculatus* Erd.; probably the same species.

*Platygerrhus ductilis* (Walk.) (Fig. 1 A—G)

Walker (Trigonoderus ductilis), Ent. Mag. 4, pp. 17—18, 1836.

Synonyms: see Kerrich & Graham (1957).

In Spinolas coll. in Torino stood under the name *Cleonymus immaculatus* 2 specimen, 1 specimen belonged to *Platygerrhus ductilis*.

Distribution: England, Czechoslovakia, Sweden, USSR.

Material studied. — Sweden: Småland, Bolmen, 1 ♀, 1940, O.R.; Öland, Halltorp, 21/7 1938, 1 ♀, A. Jansson; Gotland, Bunge, 1 ♀ 22/8 1962, E. Wirén; Gotska Sandön, St. Löv-

skogen, 1 ♀ 4/7 1946, A. Jansson; Gotska Sandön, St. lövskogen, 1 ♂, 11/8 1952, T. Nyholm; Södermanland, Tockenön, 1 ♀, 6/8 1950, A. Jansson, ibid. 1 ♂, 21/7 1950, A. Jansson; Södermanland, Lillön, 1 ♀, 29/6 1952, A. Jansson; Södermanland, Väsbyn, 1 ♂, 15/7 1951, A. Jansson; Västmanland, Strömsholm, 5 ♀+2 ♂, 1956, Th. Palm; Västmanland, Grythyttan, 1 ♀, 15/7 1949, N. Linnman; Närke, Oset, 1 ♀, 25/8 1949, 1 ♀, 16/8 1959, 2 ♀, 20/8 1949, 1 ♀, 13/8 1955, 1 ♀, 1/9 1952, A. Jansson; Närke, Sörbyskogen, 1 ♀, 20/6 1960, 1 ♀, 4/9 1959, A. Jansson; Närke, Hjälmsberg, 1 ♀, 11/8 1950, A. Jansson.

Host: Bouček (1954) "Xylophagous beetles probably Cerambycidae, reared from branches of *Tilia*, infested by the beetles *Ernopus tiliae* Panz., *Liopus punctulatus* Payk. and *Stenostola ferrea* Schrk. Kerrich & Graham (1957) mention *Anobium punctatum* Deg. Szczepanski (1961) mention *Scolytus ensifer* Eichh.

In Sweden reared from *Hylesinus oleiperda* F. and *Synchita separanda* Reitt.

#### *Platygerrhus americanus* sp.n.

♀. Metallic green mixed with violet, blue and golden green. Gaster brownish with tint of green. Scape yellowish brown at the near end of scape brown (dorsally), the rest of antenna dark brown. The mouth part and legs reddish-yellowish brown, all femora and the base of hind tibia with strongly tint of brown. Tegula and wing veins brown. The base of wings brown (particularly in the holotype).

♂. Unknown.

Length: 3,5—4,0 mm.

Holotype: (U.S. Nat. Mus. Washington) Arizona, Prescott, N.F. 18. VI.59, leg. Hopk., U.S. 34226-L.

Paratypes: 2 ♀♀. 1 ♀ (U.S. Nat. Mus.) Alaska, Waldezalsk, 3 mi W, 24.VIII. 48, Ris Sailor, Alaska Ins. Project. 1 ♀ (coll. mea) Alaska, 30 m SE Fairbanks, 9.VIII.56, *Salix* sp.; reared 2.V.57, leg. G. L. Downing, Hopk. U.S. 39354 c.

*Pl. americanus* sp.n. is similar to *Pl. ductilis* (Walk.) and *Pl. dolosus* (Walk.). It differs from *Pl. ductilis* by having reticulation on scutellum very fine (fig. 1 I), as in *Pl. dolosus*, from the latter by having only a single row of hairs in basal cell, and from both *Pl. ductilis* and *Pl. dolosus* through brownish base of wings.

#### *Platygerrhus dolosus* (Walk.)

Walker, (Trigonoderus dolosus), Ent. Mag. 4, p. 23, 1836.

Synonyms: see Kerrich & Graham (1957).

Distribution: England, Finland, Sweden, Czechoslovakia.

Material seen. — Sweden: Småland, Bolmen, 1 ♀, 10/5 1940, O.R.; Närke, Ekeberg, 1 ♀, 1/9 1935, 1 ♀, 11/9 1935, A. Jansson, Närke, Glomma, 1 ♀, 21/6 1965, Gäddeby, 1 ♀, 3/7 1954, Lugnet, 1 ♀, 30/5 1943, 1 ♀, 11/8 1959, Hjälmsberg, 1 ♂, 11/8 1958, Örebrotrakten, 1 ♀, 1938, A. Jansson; Finland: EH., Hattula, 4 ♂, 1956, M. Nuorteva.

Host: Ferrière & Kerrich (1958) "reared as external parasite of *Laemophloeus ater* (Oliv.) (Col. Cucujidae)."

#### *Platygerrhus millenius* Szczep.

Szczepanski, Bull. Ent. Pologne. XXXI, pp. 5—10, 1961.

Distribution: Polen.

Host: Unknown.

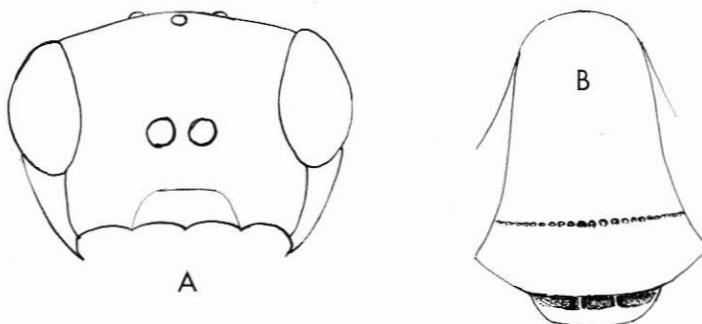


Fig. 2. A. *Trigonoderoides nigricans* (Masi) head in frontal view and B. *Plutothrix coelius* (Walk.) scutellum with frenal furrow in normal position.

Only two specimens known (1 ♀ and 1 ♂). I have not seen any specimen, and from the description it seems possible that they are small specimens of *Pl. ductilis*.

*Trigonoderoides* Kam.

Kamijo, Insecta Matsum. 25, p. 121, 1963.

Type: *Glyptosticha nigricans* Masi.

Only one species hitherto known. Masi (1926) described this species (*nigricans*) and placed it in his new genus *Glyptosticha*. In fact this species has a tooth on the anterior margin of clypeus (fig. 2 A), as in *Trigonoderus* Westw. and *Plutothrix* Först. Prepectus has a delimited triangular area before tegula.

*Trigonoderoides nigricans* (Masi)

Masi (*Glyptosticha nigricans*), Konowia. 5, pp. 353—355, 1926.

Distribution: Formosa.

Material seen. — Cotypes in Masi coll. Museo Civica di Storia Naturale "Giacomo Doria".

Host: Unknown.

*Eutelisca* gen.n.

Head (fig. 3 A) transverse with large, bulging eyes. Antennae (fig. 3 D), inserted just above a level with anterior margin of eyes. Clypeus (fig. 3 C) with a median tooth of anterior margin. Malar space nearly as long as the breadth of an eye. Collar separated and anterior with a carina. Prepectus (fig. 3 B) large with no delimited area. Notauli complete. Scutellum with frenal furrow in normal position. Propodeum (fig. 3 E) with a weak (anterior forked) carina, very strong plicae (as in *Mesopolobus* Westw.), spiracles oval and callus with moderate dense hairs. Gaster elongate with apex stylus shaped. Fore wing with basal cell not open below and with a single row of hairs near submarginal vein, speculum well developed not open

below. Postmarginal vein a little longer than marginal vein. Stigmal vein as in *Plutothrix* Först. but stigma large and rounded.

Type: *E. chilensis* sp.n.

*Eutelisca chilensis* sp.n.

♀. Dark purple coloured with tint of green, mesoscutum dark green. Basal part of scape yellowish brown, distal part brown, the rest of antenna dark brown with tint of green dorsally of pedicel. Mandibles, tegulae, wing veins and legs yellowish brown, all femora darker and hind tarsi whitish yellow.

Head (fig. 3 A) transverse as wide as thorax. Eyes large, oval and strongly bulging. Malar space nearly as the breadth of an eye. Clypeus (fig. 3 C) with a tooth. Between base of clypeus and toruli a longitudinal weak lump. Antennae (fig. 3 D), 11263, with rhinariae scattered (more or less in 3 rows) over each funicle joint. Clava rounded (as in *Gastracanthus* Westw.) and with an area of micropilosity. Pronotum with collar separated and anterior with a carina. Scutellum with two rows of setae on either side, frenal furrow in normal position. Head and thorax with equal fine reticulation. Propodeum (fig. 3 E) with a median, anterior forked, carina, plicae complete, spiracles near anterior margin of propodeum, callus with moderate dense hairs. Petiole short, transverse. Gaster elongate with stylus shaped apex. Posterior margins of gaster not sinuated. Fore wing with limited basal cell, not open below and above with a singel row of hairs near and parallel with submarginal vein. Speculum well developed and not open below. Postmarginal vein a little longer than marginal vein, stigmal vein (fig. 3 F) of moderate length.

♂. Unknown.

Length: 5,5 mm.

Holotype: (coll. mea) Chile, Valdivia.

*Eutelisca* gen.n. is not particularly similar to any genus in the tribe *Trigonoderini*.

*Plutothrix* Först.

Förster, Hym. Stud. 2, p. 46, 1856. No species.

Mayr, Verh. k.—k. zool.—bot. Ges. Wien, 54, pp. 586—588, 1904.

Type: *Plutothrix försteri* Mayr = *Trigonoderus trifasciatus* Thoms. 5 species are known from the Holarctic region.

Key to species of *Plutothrix* from Holarctic region

1. Propodeum with a short median carina (fig. 4 A) ..... 2.
- . Propodeum with a long median carina (fig. 4 B) ..... 3.
2. Propodeum wrinkly in the middle. Gaster elongate, narrow and with stylus shaped apex (fig. 4 G) ..... *Pl. unguittus* (Girlt.)
- . Propodeum (fig. 4 A) only reticulated in the middle. Gaster shorter and wider, apex not particularly stylus shaped (fig. 4 f) ..... *Pl. coelius* (Walk.)
3. Propodeum smooth in the middle. Fore wings not maculated. Basal cell with only few hairs ..... *Pl. cisae* Hedqv.

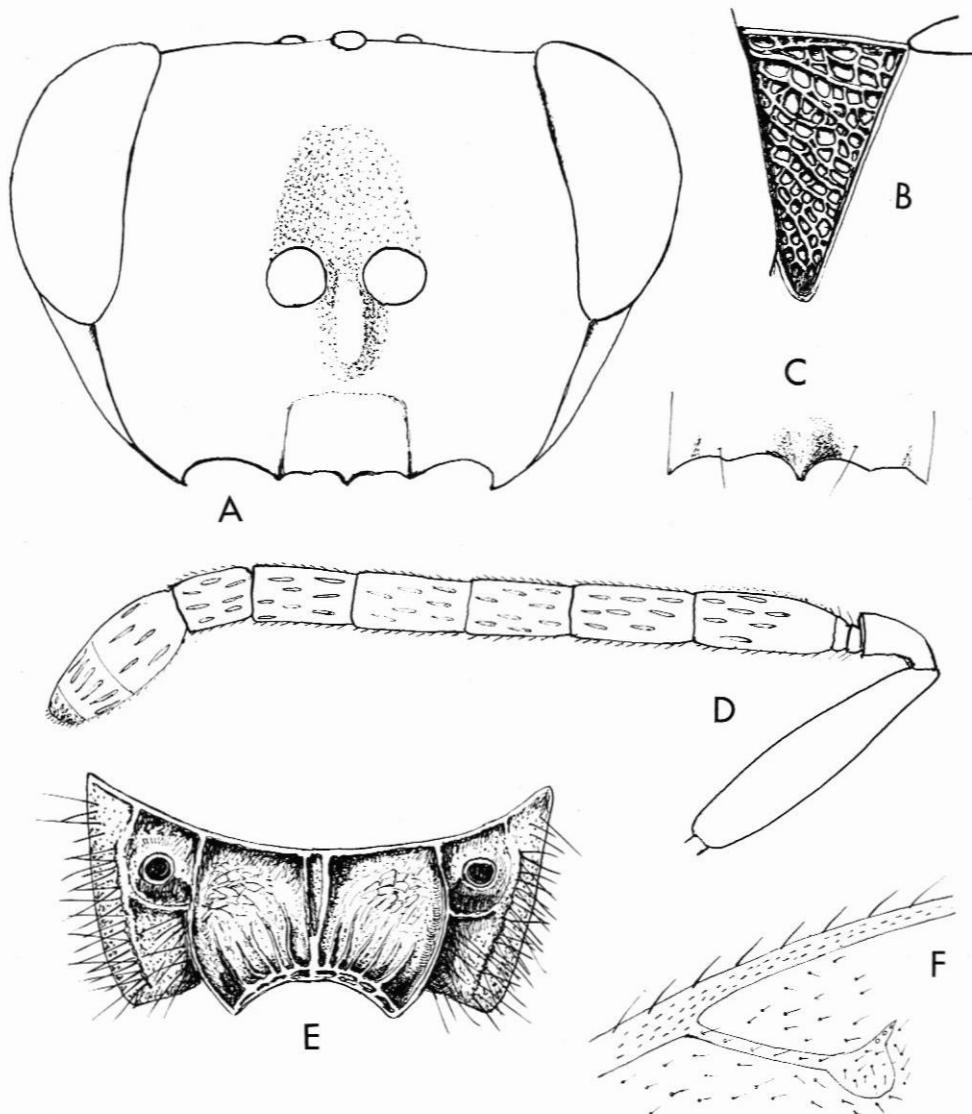


Fig. 3. *Eutelisca chilensis* gen. et sp.n., A. Head in frontal view, B. Prepectus, C. Clypeus (anterior margin), D. Antenna, E. Propodeum and F. Stigmal vein.

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- Propodeum reticulated or wrinkly in the middle. Fore wings maculated. Basal cell with rows of hairs ..... 4.
- 4. Fore wings trifasciate. 1st tergite with posterior margin deep incised in the middle ..... *Pl. trifasciatus* (Thoms.)
- Fore wings not trifasciate, only a cloud near stigma (sometimes with also a cloud below marginal vein f. vittiger (Thoms.). 1st tergite of gaster with posterior margin not deep incised in the middle ..... *Pl. scenicus* (Walk.)

*Plutothrix unguttus* (Girlt.)

Girault (*Trigonoderus unguttus*), Ent. News. 28, pp. 396—397, 1917.

Distribution: Canada, U.S.A.

Material seen. — U.S.A.: Croton, Conn., 1 ♀, 7/3 1948, A. Jansson; Plummer, Md, 1 ♀, 19/VI 1913, R. S. Shannon; New Hope, N.Y., 1 ♂ 1 ♀, VI.30 1958, J. B. Simeone; Des Blaines, 1 ♀, Febr. 25 1954, R. C. Graves (ex Polypore); Atlanta, Ga, 1 ♀, 6—17—1935, P. W. Fattig; Princeton, NJ, 2 ♀, KWC; Onteora Mt., Greene Co. N.Y., July 16 1929, L. O. Howard; Halsey, Nebr. 1 ♀ Aug. 8 1958, R. Henzlik.

Canada: Gatinau Park, Que., 1 ♀, May 17 1965, D. P. Pielou, (ex *Polyporus betulinus*); Franklin, Que., 1 ♀, 6.VIII 1925, C. B. Hutchings; Knowlton, Que., 1 ♀, 2.VIII 1929, L. J. Milne; Aylmer, Que., 1 ♀, 4.VII 1924, C. H. Curran; Bala, Ont., 1 ♀, 19.VII 1932, G. S. Walley; Aldershot, N.S., 1 ♀, Sept. 3 1952, K. H. Sanford (Taken on apple); Rondeau Park, Ont., 1 ♀, VI.19, 1962, S. M. Clark; Merivale, Ont., 15.VII 1954, 1 ♀, E. C. Becker (Host: *Thymalus marginicollis* or *Diaperis maculata*).

Host: Probably *Coleoptera* feeding in tree fungi (*Polyporus* sp.) following species are also mention *Thymalus marginicollis* Chev. and *Diaperis maculata* Oliv. Graves (1960): “*Euparius marmoreus* Oliv. in shelf fungi.”

*Plutothrix coelius* (Walk.) (fig. 4 A, C, F)

Walker, (*Pteromalus coelius*), Monographia Chalciditum, I, pp. 272—273, 1839.

Synonyms: see Kerrich & Graham (1957).

Distribution: England, Finland, Ireland, Germany, Norway, Czechoslovakia, Hungary, Sweden.

Material seen. — Sweden: Skåne, Skäralid, 1 ♂, 1948, T. Nyholm; Blekinge. Rödeby, 1 ♀ 20/6 1954, A. Sundholm; Gotland, St. Karlsö, 2 ♀♀ 1 ♂, 7—10/8 1960, N. Linnmann; Öster-götland, Simonstorp, 1 ♀, 3/7 1956, K. J. Hedqvist; Södermanland, Viss Vass, 1 ♀, 16/8 1953, T. E. Leiler; Västmanland, Grythyttan, 1 ♀, 1/7 1953, N. Linnmann; Västerbotten, Hällnäs, 1 ♀, 18/7 1940, 2 ♀♀, 11/7 1945, K. J. Hedqvist.

Host: *Anobium punctatum* Deg. (Col. Anobiidae).

*Plutothrix cisae* Hedqv.

Hedqvist, Ann. En. Fenn. 32, pp. 197—198, 1966.

Distribution: Finland, Canada.

Material seen. — Canada: Ottawa, Ont. 4 ♀ 1 ♂, 12.VII—16.VII 1954, E. C. Becker (prob. *Platypeza* sp.).

Host: Reared from *Polyporus* sp. infested with *Cis boleti* Scop.

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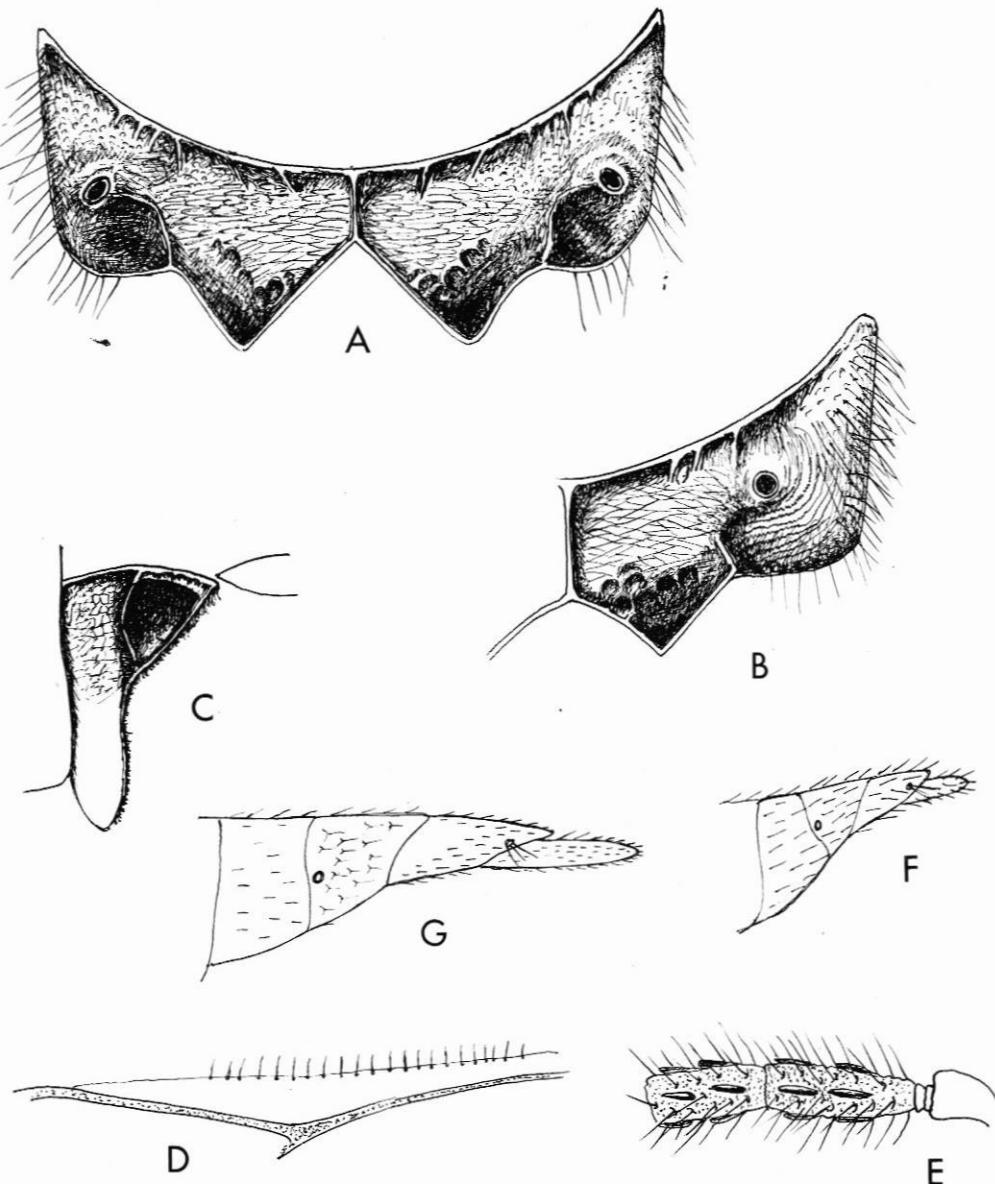


Fig. 4, A, C, F. *Plutothrix coelius* (Walk.), A. Propodeum, C. Prepectus, F. Apical part of gaster, B, D, E. *Pl. scenicus* (Walk.), B. Propodeum, D. The costal cell of hind wing, E. 1st and 2nd funicle joints of antenna (male), G. *Pl. unguittus* (Girlt.) apical part of gaster.

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*Plutothrix trifasciatus* (Thoms.)

Thomson (*Trigonoderus trifasciatus*), Hymenoptera Scandinavia, 5, pp. 11—12, 1878.

Synonyms: see Kerrich & Graham (1957).

Distribution: Czechoslovakia, England, Sweden, Denmark, Germany, USSR.

Material seen. — *Sweden*: Blekinge, Torskors, 1 ♂, 14/7 1950, A. Sundholm; Småland, Bränstorp, 1 ♀, 18/8 1958, S. Erlandsson.

Host: Unknown.

*Plutothrix scenicus* (Walk.) (fig. 4 B, D, E, 5 B)

Walker (*Pteromalus scenicus*), Ent. Mag. 4, pp. 10—11, 1836.

Synonyms: see Kerrich & Graham (1957).

In Spinolas coll in Torino stood under the name *Cleonymus bicoloratus* Spin. a pin with fragments of a *Trigonoderus* sp. (badly mouldy).

Distribution: Czechoslovakia, England, Denmark, Finland, Ireland, Sweden, USSR.

Material seen. — *Sweden*: Gotska Sandön, 1 ♀, 17/8 1955, K. J. Hedqvist. *Denmark*: Falster, 1 ♀, 11/8 1962, E. Kangas.

Host: Reared from *Anobium punctatum* Deg. (Col. Anobiidae).

*Trigonoderus* Westw.

Westwood, Phil. Mag. 1, p. 127, 1832.

Synonyms: see Kerrich & Graham (1957).

Type: *T. princeps* Westw.

Many species are described as belonging to *Trigonoderus* Westw. All European species are treated by Kerrich & Graham (1957); from other parts of the world following species are listed:

*T. aegeriae* Ashm.=*T. aegeriae*

*T. algonquinia* Girlt.=*Platygerrhus algonquinia* (Girlt.)

*T. areolatus* Cam.=*Habrocytus*-group

*T. brasiliensis* Ashm.=*T. brasiliensis*

*T. irvingi* Girlt.=*T. irvingi*

*T. nephele* Walk.=*Mesopolobus nephele* (Walk.) comb.n.

*T. nonstylatus* Girlt.=genus in *Lamprotatinae*

*T. unguttus* Girlt.=*Plutothrix unguttus* (Girlt.) comb.n.

*T. varipes* Vier.=*Habrocytus*-group

I have not seen *T. aegeriae* Ashm., *T. irvingi* Girlt. and *T. brasiliensis* Asm. and I can not satisfactorily place them in a key. The following key is a modification of a key from Ferrière & Kerrich (1958) in order to include a new species from Burma.

#### Key to the species of *Trigonoderus* Westw. from the Old World.

1. Pronotum short, rather sharply margined. Propodeum with the median carina traversed by short transverse carinae. Wings bifasciate . . *T. cyanescens* (Fürst.)

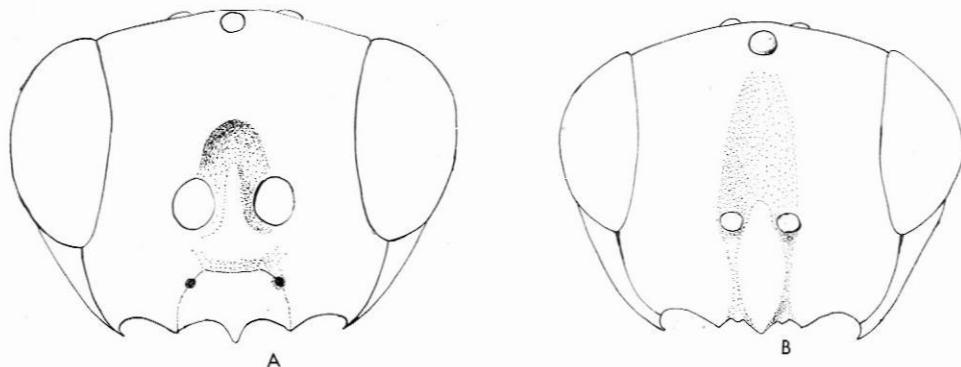


Fig. 5, A. *Trigonoderus princeps* Westw. head in frontal view and B. *Plutothrix scenicus* (Walk.) head in frontal view.

- Pronotum longer, not sharply margined. Propodeum with the median carina not traversed by short transverse carinae. Wings not bifasciate ..... 2.
- 2. Fore wings with costal cell moderately broad and with postmarginal vein almost reaching apex. Scutellum slightly but distinctly convex ..... 3.
- Fore wing with costal cell broader and with postmarginal vein not almost reaching apex. Scutellum almost flat ..... *T. princeps* Westw.
- 3. Thorax with transverse striato-reticulated puncturation. Fore wing with a cloud just below stigma ..... *T. filatus* Walk.
- Thorax with normal, fine reticulation. Fore wing with no cloud below stigma, the only cloud a bent over extreme apex ..... *T. malaisei* sp.n.

#### *Trigonoderus cyanescens* (Först.)

Förster (*Cleonymus cyanescens*), Beiträge zur Monographie der Pteromalinen Nees. p. 31, 1841.

Synonyms: *Trigonoderus pedicellaris* Thoms., Hym. Scand. 5, pp. 8—9, 1878.

Distribution: England, France, Czechoslovakia, Sweden.

Host: Unknown.

#### *Trigonoderus princeps* Westw. (fig. 5 A, 6 A, C, D, E)

Westwood, Phil. Mag., I, p. 127. 1832.

Synonyms: see Kerrich & Graham (1957).

Distribution: England, Czechoslovakia, Finland, Norway, Germany, USSR, Japan, Sweden.

Material seen. — *Sweden*: Skåne, Sandhammaren, 1 ♀, 21/7 1965, K. J. Hedqvist; Halland, Simlångsdalen, 1 ♀, 16/5 1966, T. Hedqvist; Gotska Sandön, 1 ♀, 1954, T.-E. Leiler; Uppland, Vallentuna, 1 ♂, 22/9 1962, K. J. Hedqvist.

*Finland*: EH., Luopioinen, 7 ♀♀ 8 ♂♂, 1964, E. Kangas (reared from branches of *Tilia* infested by *Stenostola ferrea* Schrank).

*Japan*: Sapporo, Hokkaido, 1 ♀, 12.VIII 1958, S. Momoi; Sapporo, Hokkaido, 1 ♂, 29.V 1958, 1 ♂, 26.V 1960, K. Kamijo.

Host: Reared from *Parmena balteatus* L. (Col. Cerambycidae).

*Trigonoderus filatus* Walk.

Walker, Ent. Mag., 4, p. 17, 1836.

Synonyms: see Kerrich & Graham (1957)

Distribution: England, Germany, Sweden.

Material seen. — *Sweden*: Gotland, 1 ♀, 19—26/6 1962, E. Wirén; Uppland, Vallentuna, 1 ♀, 23/7 1961, 1 ♂, 1/9 1961, Össeby, 1 ♂, 11/6 1961, Korpström, 1 ♂, 3/8 1963, K. J. Hedqvist.

Host: Reared from *Pogonocherus hispidus* L. (Col., Lamiinae).

*Trigonoderus malaisei* sp.n.

♀. Golden green with tint of purple. Gaster brown with reflections of goldengreen and purple, 4th—5th tergites laterally with an area with dense white hairs. Scape and pedicel yellowish brown, the rest of antenna black. Mouth part, tips of coxae and the rest of legs and tegulae pale yellowish brown. Wing veins brown. Apex of fore wing pale brown.

Head wider than thorax. Eyes large, oval. Head and thorax equal reticulated. Propodeum (fig. 6 F) with long median carina, nearly smooth in the middle. Spiracles near anterior margin of propodeum. Gaster elongated, narrow with 1st—2nd tergites deep incised at posterior margin. Apex of gaster stylus shaped. Fore wings with short hairs and very thin. Postmarginal vein almost reaching apex, stigmal vein (fig. 6 B) short, emitted at about 45°.

♂. Similar to female.

Length: ♀. 6,5 mm. ♂. 4,6 mm.

Holotype: (Swed. Mus. Nat. Hist.) N.E. Burma, Kambaiti, 7000 ft., 4. V. 1934, R. Malaise.

Allotype: do., 8.IV. 1934, R. Malaise (coll. mea).

*T. malaisei* sp.n. is similar to *T. princeps* Westw. and *T. filatus* Walk. but propodeum is different, the dense hairs on gaster and the colour are also different.

*Trigonoderus irvingi* Girlt.

Girault, Des. Hym. Chalcidoid. Variorum cum Observ. 5, p. 15, 1917. (privately printed)

It has been impossible to study this description and I can not place this species.

*Trigonoderus aegeriae* Ashm.

Ashmead, Trans. Amer. Ent. Soc. 14, pp. 192, 1887.

According to the description and the host I am not sure that *T. aegeriae* Ashm. belongs to *Trigonoderus* Westw. It seems to me to be a species of the *Habrocytus*-group.

Entomol. Ts. Arg. 89. H. 1—2, 1968

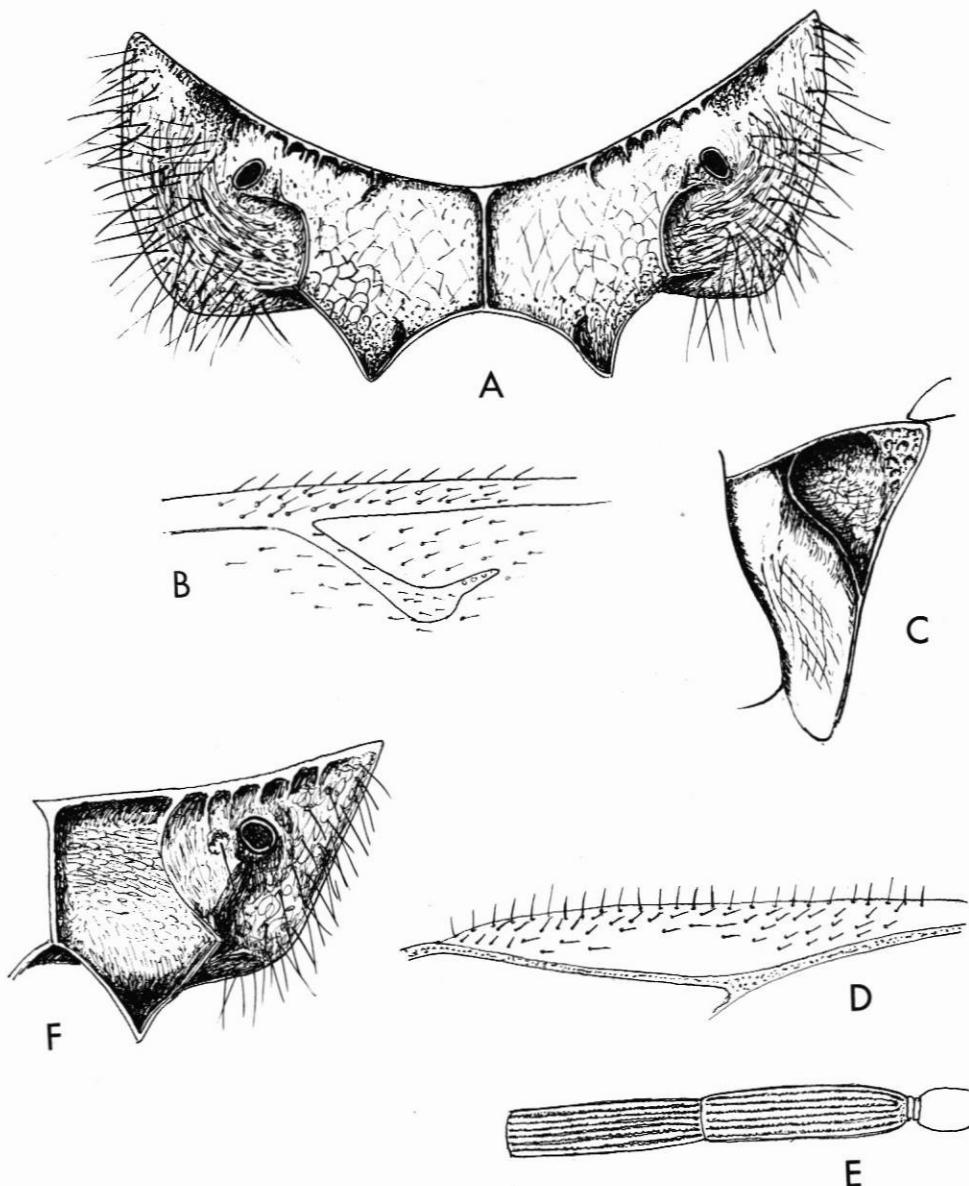


Fig. 6, A, C, D, E. *Trigonoderus princeps* Westw., A. Propodeum, C. Prepectus, D. The costal cell of hind wing, E. 1st and 2nd funicle joints of antenna (male), B, F. *Tr. malaisei* sp.n., B. Stigmal vein and F. Propodeum.

*Entomol. Ts. Arg. 89. H. 1-2, 1968*

*Trigonoderus brasiliensis* Ashm.

Ashmead, Mem. Carnegie Mus. I, p. 485, 1904.

I have not seen the type but I give here the description in extenso: "Female. — Length 4 mm. Bronzed green, the face in front, the thorax at the sides and beneath, and the coxae bluish-green; abdomen elongate, conically pointed, much longer than the head and thorax united, blue-black, with a metallic aeneous tinge at base: scape, pedicel, tegulae and legs, except as noted, honey-yellow, the hind femore dusky; flagellum brown-black. Wings hyaline, the veins yellowish. Brazil: Chapada, in April. One specimen."

*Glyptosticha* Masi

Masi, Konowia, 5, p. 348, 1926.

Type: *G. flavipes* Masi.

In 1926 Masi created a new genus *Glyptosticha* for two new species from Formosa. 1963 Kamijo treated *Glyptosticha* Masi and made a new genus for *G. nigricans* Masi, *Trigonoderoides*, and added a new species to *Glyptosticha*. *Glyptosticha* seems to be widely distributed in the Eastern Palearctic and the Indo-Malayan regions. Two new species are described in the following. In the collection of British Museum (Nat. Hist.) I have seen a specimen under the name *Arthrarcha varilineata* Cam. and a second under the name *Trigonoderus striolatus* Cam. My new species seem not to have been described by Cameron and belong to *Glyptosticha*. *Arthrarcha varilineata* is a male and seems to be similar to the new species described as *G. perakensis* sp.n. below. *Trigonoderus striolatus* is also a male but not similar to any described species. I have made a sketch of head in front view and propodeum (see fig. 7 B, C) of the latter.

Remarks: In the following key the micropilosity of clava is only applicable to the female.

Key to the species of *Glyptosticha* Masi.

1. Propodeum reticulated in the middle. Malar space very short, 4 times shorter than the breadth of an eye ..... *G. perakensis* sp.n.
- Propodeum smooth in the middle. Malar space longer,  $2\frac{1}{2}$ —3 times shorter than the breadth of an eye ..... 2.
2. Micropilosity of clava restricted to third joint. Propodeum with a rather shallow longitudinal depression, not costate ..... *G. flavipes* Masi
- Micropilosity of clava extending to 2nd and a part of 1st joints. Propodeum with the longitudinal depression deep, strongly costate ..... 3.
3. Micropilosity of clava extending to 2nd joint. Femora blackish in greater part. Gaster entirely black ..... *G. sulcata* Kam.
- Micropilosity of clava extending to the middle of 1st joint. Femora yellowish brown. Gaster with basal part yellowish brown. (about the male see description) ..... *G. burmanica* sp.n.

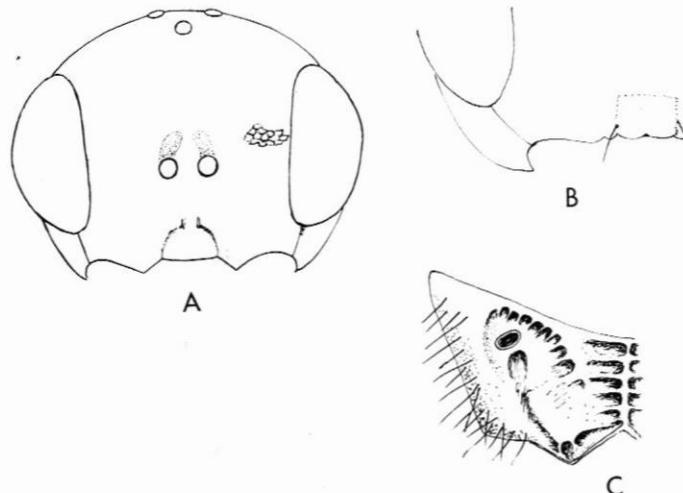


Fig. 7. A. *Glyptosticha* sp., B. *Glyptosticha* sp. part of head in frontal view (Trigonoderus striolatus Cam. ?) and C. Propodeum (Trigonoderus striolatus Cam. ?).

*Glyptosticha perakensis* sp.n.

♂. Black with tint of blue on thorax and hind coxae. Scape, pedicel, annelli and base of 1st funicle joint, mandibles, palpi, legs and tegulae yellowish brown. Fore and mid coxae brown with tint of blue. Wing veins brown.

Head with face reticulated. Clypeus, genae, cheeks and vertex smooth, occiput transverse striated. Clypeus (fig. 8 F) nearly straight. Malar space short, 4 times shorter than the breadth of an eye. Thorax reticulated, scapulae and axillae striated. Propodeum (fig. 8 E) with fine reticulation. Fore wing with basal cell hairy, hind wing with costal cell with a complete row of hairs along margin.

♀. Unknown.

Length: 4.0—4.5 mm.

Holotype: (Brit. Mus. Nat. Hist.) Perak, F. M. S. Batand Padang, Jor Camp 1800 ft, June 24, 1923, leg. H. M. Pendlebury.

Paratype: 1 ♂ (coll. mea) Perak, Jor Camp 2000 ft. August 21, 1922, leg. E. Sumund.

*G. perakensis* sp.n. differs from other species of *Glyptosticha* Masi by having very short malar space and reticulated propodeum.

*Glyptosticha flavipes* Masi (fig. 7 A.)

Masi, Konowia. 5, p. 349, 1926.

Distribution, Formosa.

Host: Unknown.

*Glyptosticha sulcata* Kam.

Kamijo, Insecta Matsum. 25, pp. 119—121, 1963.

Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu)

Host: Unknown.

*Glyptosticha burmanica* sp.n.

♀. Black with tint of blue on thorax, axillae and scutellum are golden green. Scapus brown with reddish brown base, the rest of antenna black. Mandibles, palpi, tegulae, legs (coxae only the tips) and basal part of gaster yellowish brown, the rest of gaster dark brown. 4th and 5th tergites laterally with an area of dense white hairs. Wing veins brown.

Head wider than thorax. Clypeus (fig. 8 B) with anterior margin sinuate. Antenna (fig. 8 D) elongate with many sensillae on funicle joints. Face reticulated, along genal sutur (subocular line) smooth. Thorax with a transverse, carinated (costate) furrows between scutellum and axillae even notaui costate. Mesonotum, axillae and scutellum reticulated, scapulae and pronotum transversely striated. Propodeum (fig. 8 A) with a median costate depression, sulcus spiracularis deep and strongly costate. Spiracles large, oval, near posterior margin of metathorax, callus with moderately dense hairs. Petiole nearly square, gaster very elongate and narrow. Fore wing with postmarginal vein twice as long as marginal vein, stigmal vein (fig. 8 C)  $2\frac{1}{2}$  times shorter than marginal vein, hind wing with costal cell with not complete row of hairs along margin.

♂. Similar to female but gaster not yellowish brown on the basal part and narrow and compressed laterally.

Length: ♀ 8,0 mm, ♂ 4,2 mm.

Holotype: (Swed. Mus. Nat. Hist.) N.E. Burma, Kambaiti, 7000 ft. 8/5 1934, leg. R. Malaise.

Allotype: do., 4/4 1934 (coll. mea).

*G. burmanica* sp.n. is similar to *G. flavipes* and *G. sulcata* but differs in the sculpture of propodeum. The female of *G. burmanica* differs from both *G. flavipes* Masi and *G. sulcata* Kam. by having yellowish brown basal part of gaster and the micropilosity of clava extending from the middle of 1st joint to apex of clava. The male is more difficult to separate from *G. flavipes* (male) and *G. sulcata* (male) but is distinguishable by a strongly costate sulcus spiracularis.

*Ogloblinisca* gen.n.

Head large, wider than thorax. Clypeus (fig. 10 A, B) sinuated. Antennae inserted above a level with anterior margin of eyes, apex of clava with micropilosity. Pronotum sometimes with a transverse callosity. Prepectus with a delimited triangular area before tegulae. Notauli moderately deep, complete. Scutellum large with frenal furrow in normal position. Propodeum (fig. 9 A) with a median carina, plica and deep sulcus spiracularis, callus with thin hairs. Petiole short transverse. Gaster elongate, acuminate. Fore wing with postmarginal vein nearly twice as long as marginal vein, marginal vein  $1\frac{1}{2}$  times as long as stigmal vein. Basal cell hairy, speculum wanting, costal cell in hind wing with a complete row of hairs.

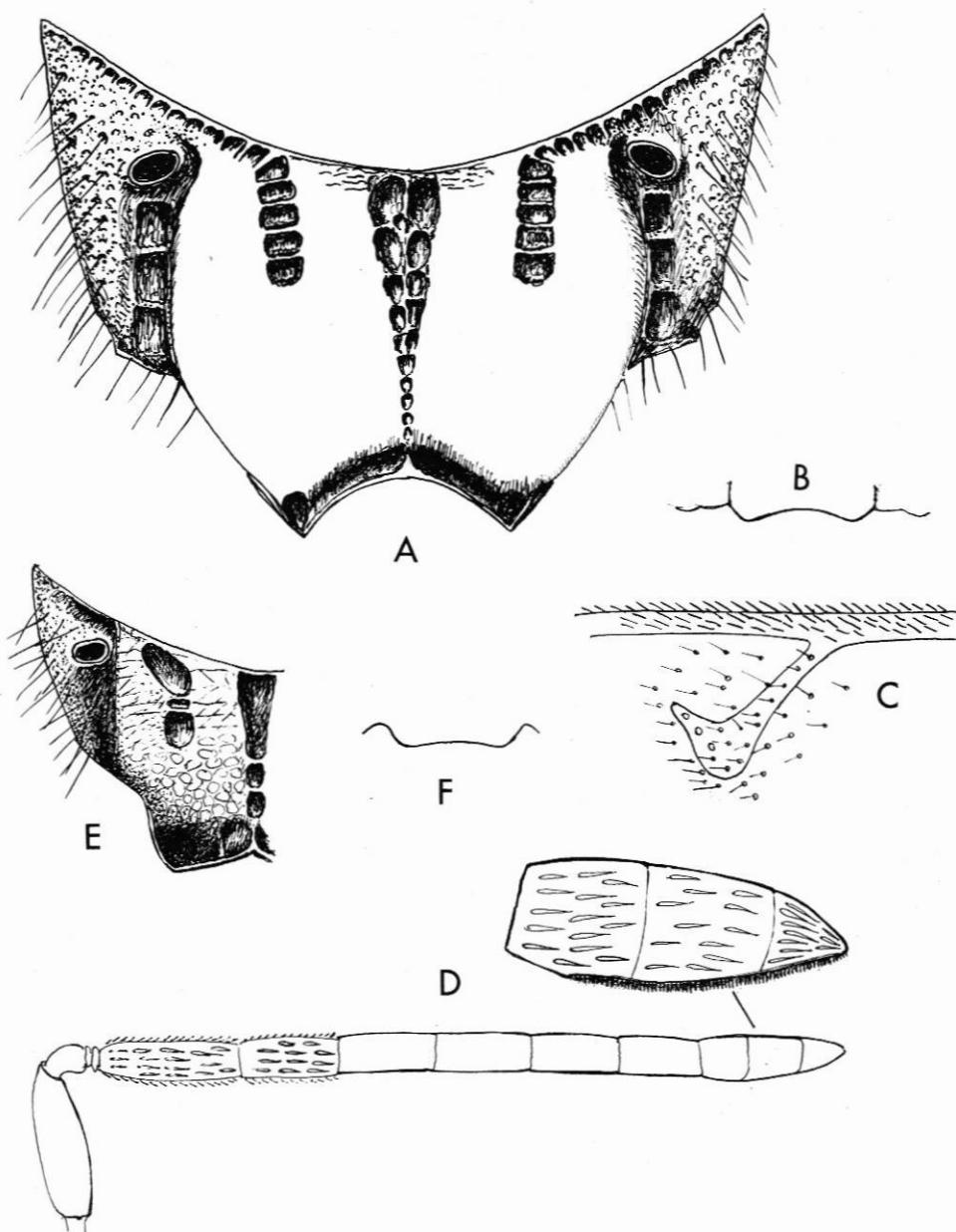


Fig. 8, A—D. *Glyptosticha burmanica* sp.n., A. Propodeum, B. Clypeus (anterior margin), C. Stigmal vein, D. Antenna. E—F. *Gl. perakensis* sp.n., E. Propodeum and F. Clypeus (anterior margin).

*Ogloblinisca* gen.n. is named after Dr. Ogloblin. He sent me 2 specimens from Argentina as a gift. The new genus is similar to *Trigonoderus* Westw. and *Plutothrix* Först. but is distinguishable by edentate clypeus and a different propodeum.

Type: *O. maculata* sp.n.

Key to the species of the genus *Ogloblinisca* gen.n.

♀♀

1. Pronotum with a transverse callosity. Antenna with funicle joints pale brown ..... *O. maculata* sp.n.
- . Pronotum with no transverse callosity. Antenna with funicle joints black. . . . 2.
2. Pronotum with a distinct collar. Clypeus with anterior margin sinuate ..... *O. flavipes* sp.n.
- . Pronotum flattened without a distinct collar. Clypeus with anterior margin a little arched ..... *O. americana* sp.n.

♂♂

1. Antenna as long as the body. Funicle joints with suberect, dense, short hairs ..... *O. maculata* sp.n.
- . Antenna much longer than the body. Funicle joints with very short hairs. .... *O. americana* sp.n.

*Ogloblinisca maculata* sp.n.

♀. Blueish black with tint of bronze of face and tint of purple on thorax. Gaster dark brown with tint of blue basally. Scape yellowish brown, the rest of antenna brown, successively darker towards apex. Mandibles, legs (except coxae) and tegulae dark yellowish brown. Wing veins brown. Fore wing with a brown macula below stigma and extending towards the base of the wing and the apex of fore wing infuscate.

Head (fig. 10 A) large, wider than thorax. Eyes large, malar space short 4,5 times shorter than the breadth of an eye. Clypeus (fig. 10 B) sinuate, between the base of clypeus and toruli a small knob. Head reticulated, cheek smooth. Antenna elongate with funicle joints much longer than wide and with scattered rhinariae.

Pronotum with a transverse callosity. Thorax reticulated, finer on scutellum. The latter with frenal furrow in normal position. Prepectus (fig. 9 B) with a delimited triangular area before tegula, the delimited triangular area rugose and hairy. Propodeum (fig. 9 A) with a median carina and from this carina small costulae, plica not complete. Spiracles large, oval, near posterior margin of metanotum, sulcus spiracularis deep, callus with thin hairs. Petiole short, transverse. Gaster elongate as long as head and thorax united. Legs stout with hind and fore femore moderately swollen. Fore wing without bare basal cell and speculum wanting. Postmarginal vein nearly twice as long as marginal vein, marginal vein  $2\frac{1}{2}$  times as long as stigmal vein (fig. 9 D). Costal cell in hind wing with a complete row of hairs.

♂. Similar to the female but antennae (fig. 9 C) are short and have short dense hairs. Fore wing without any distinct macula.

Lentgh: ♀. 5,0—6,5 mm, ♂. 4,2 mm.

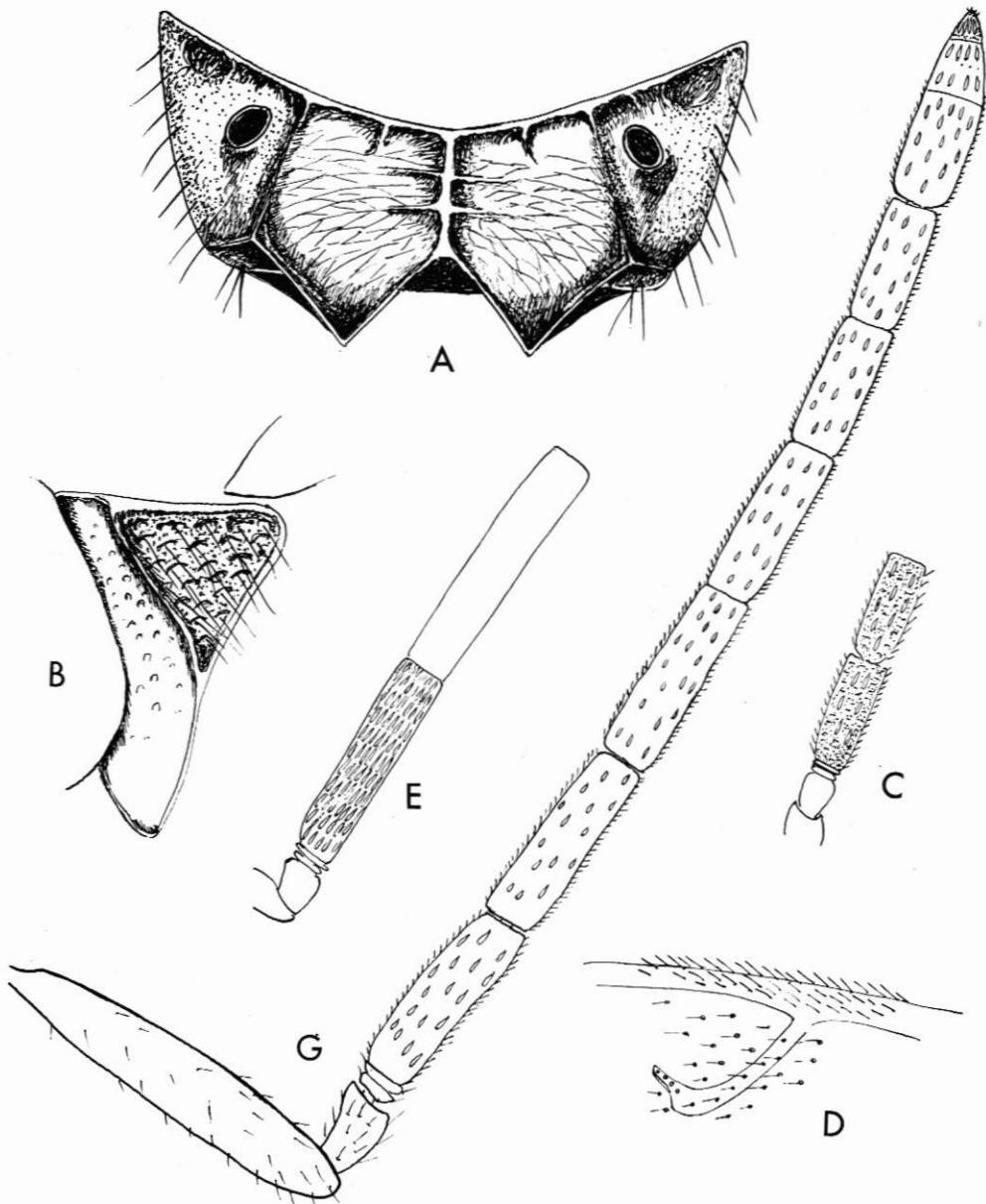


Fig. 9, A—D. *Ogloblinisca maculata* gen. et sp.n., A. Propodeum, B. Prepectus, C. 1st and 2nd funicle joints of antenna (male), D. Stigmal vein, E. *O. americanus* sp.n. 1st and 2nd funicle joints of antenna (male) and G. *O. flavipes* sp.n. antenna.

*Entomol. Ts. Arg.* 89, H. 1-2, 1968

Holotype: (coll. mea) Argentina, Loreto, Misiones, 7.XII.1936, leg. A.A. Oglöblin.

Paratypes: 4 ♀♀ 1 ♂. 1 ♀ (coll. mea) Argentina, Est. Exp. Loreto Misiones, 20.VIII., leg. A. A. Oglöblin.

1 ♂ 1 ♀ (coll. mea) Brazil, Nova Teutonia, 21/6 1945, 1965, leg. F. Plaumann.

2 ♀♀ (Brit. Mus. Nat. Hist.) Brazil, Nova Teutonia 26.I.1939, 21.VII.1948, leg. F. Plaumann.

Host: Unknown.

Distribution: Argentina, Brazil.

*Ogloblinisca flavipes* sp.n. (fig. 9 G, 10 C)

♀. Blue-black with tint of bronze on face and purple tint on thorax. Propodeum and basal part of gaster with tint of golden green. Scapus yellowish brown with dark brown distally and dorsally. Pedicel dark brown, the rest of antenna black. Legs except coxae and tegulae yellowish brown. Wing veins brown, fore wing with a brown macula below stigma.

*O. flavipes* sp.n. is similar to *O. maculata* sp.n. but differs in having black funicle joints and clava. Malar space longer about 2 1/2 times shorter the breadth of an eye. Pronotum with collar without a transverse callosity.

♂. Unknown.

Length: ♀. 5,8—6,2 mm.

Holotype: (coll. mea) Brazil, Nova Teutonia, 27/7 1963, leg. F. Plaumann.

Paratypes: 4 ♀♀. 2 ♀♀ (coll. mea) do.

2 ♀♀ (Brit. Mus. Nat. Hist.) do., 23/7 1937 and 7/7 1938, leg. F. Plaumann.

Host: Unknown.

Distribution: Brazil.

*Ogloblinisca americana* sp.n.

♀. Green, head with a mixture of blue and green, thorax golden green. Gaster dark brown with tint of blue on basal part, ventrally at basal part yellowish brown. Scapus with extreme basal part yellowish brown, the rest of scapus with tint of green and the rest of antenna black. Legs except coxae and tegulae yellowish brown. Wing veins brown.

Head as wide as thorax and reticulated, behind genal suture smooth. Clypeus (fig. 10 E) with anterior margin a little arched. Pronotum flattened with no distinct collar. Propodeum (fig. 10 D) with very weak median carina and small costulae, reticulated, sulcus spiracularis deep, plica short and callus with thin hairs. Spiracles oval. Gaster elongate with a stylus shaped apex. Fore wing with postmarginal vein 1 1/2 times as long as marginal vein, basal cell hairy and speculum wanting.

♂. Similar to the female but antennae longer than the body and with very long funicle joints (fig. 9 E) Petiole as long as wide. Propodeum more sculptured than in female.

Length: ♀ 5,5—8,3 mm, ♂ 4,5—5,5 mm.

Holotype: (U.S. Nat. Mus. Washington) Durham, N.O., IX.22.1946, De: Quercus marylandica, leg. W. M. Haliburton.

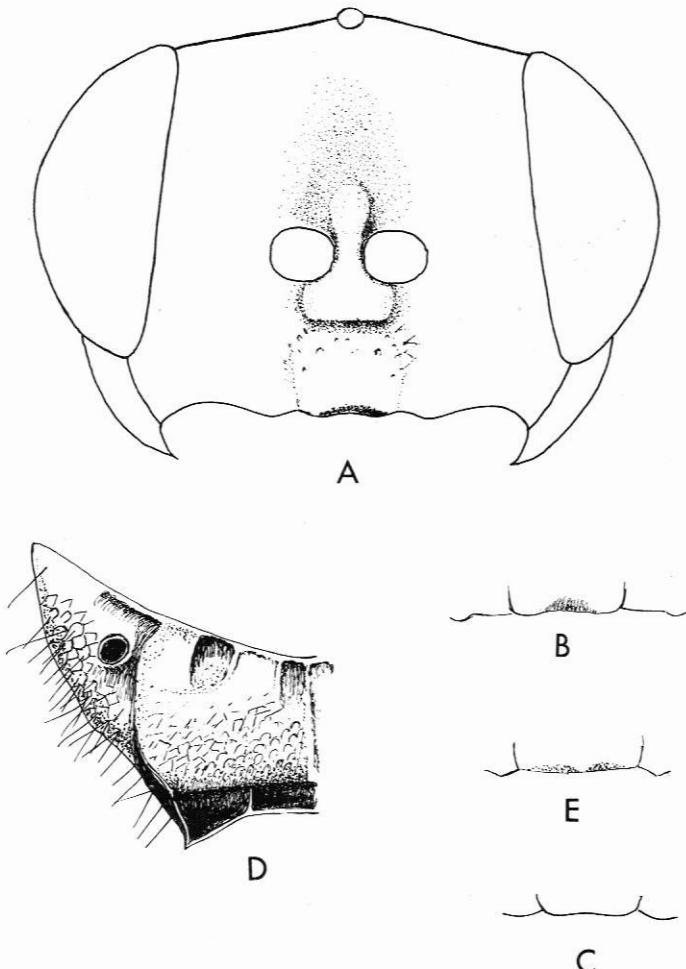


Fig. 10, A—B. *Ogloblinisca maculata* gen. et sp.n., A. Head in frontal view, B. Clypeus (anterior margin), C. *O. flavipes* sp.n. Clypeus (anterior margin), D—E. *O. americana* sp.n., D. Propodeum and E. Clypeus (anterior margin).

Paratypes: 4 ♀♀ 3 ♂♂, 1 ♂ (U.S. Nat. Mus. Washington) Mass. Nantucket, VIII.6.1929, leg. C. M. Johnson.

1 ♀ (Canad. Nat. Coll., Ottawa) Maine, Dryden, 3.VII.1959, leg. G. H. Heinrich.

1 ♀ (Canad. Nat. Coll., Ottawa) Ont. Gananoque, 12.VII.1941, leg. G. S. Walley.

1 ♀ (Canad. Nat. Coll., Ottawa) N. C. Highlands 3800, 15.VI.1957, leg. J. R. Vockeroth.

1 ♂ (Canad. Nat. Coll., Ottawa) Ont. Rondeau Park, 28.VI.1962, leg. S. M. Clark.

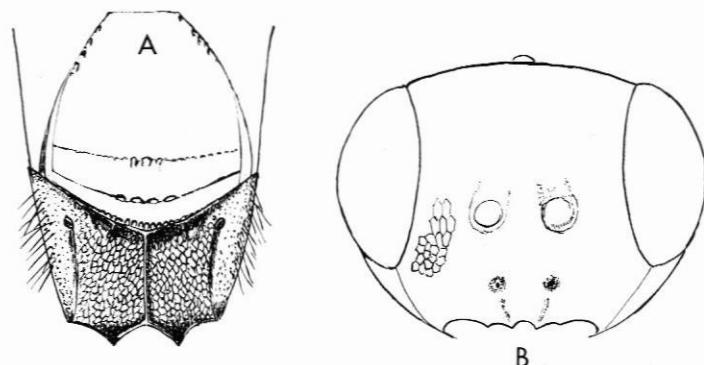


Fig. 11, A—B. *Erdoesia tessellata* Bouč., A. Propodeum and scutellum and B. Head in frontal view.

1 ♀ (coll. mea) N. C. Highlands, 16.VI.1957, leg. W. R. M. Mason.

1 ♂ (coll. mea) S. C. Aiken, 13.VI.1957, leg. J. R. Vockeroth.

Host: Unknown.

Distribution: U.S.A., Canada.

#### *Erdoesia* Bouč.

Bouček, Acta Soc. Ent. Čechosl. 54, pp. 157—159, 1957.

Type: *E. tessellata* sp.n.

Only one species known, the type.

#### *Erdoesia tessellata* Bouč. (fig. 11 A, B)

Bouček, Acta Soc. Ent. Čechosl. 54, pp. 159—161, 1957.

Distribution: Czechoslovakia, Germany, Hungary.

Host: Unknown.

#### *Janssoniella* Kerr.

Kerrich, Trans. Soc. Brit. Ent. 12, pp. 303—304, 1957.

Type: *J. caudata* Kerr.

3 species known from the Holarctic region. A new species is described in the following.

#### Key to the species of the genus *Janssoniella* Kerr.

1. Fore wing with a macula ..... *J. notata* Kam
- . Fore wing immaculate ..... 2.
2. Propodeum with short median carina (fig. 13 D) ..... 3.

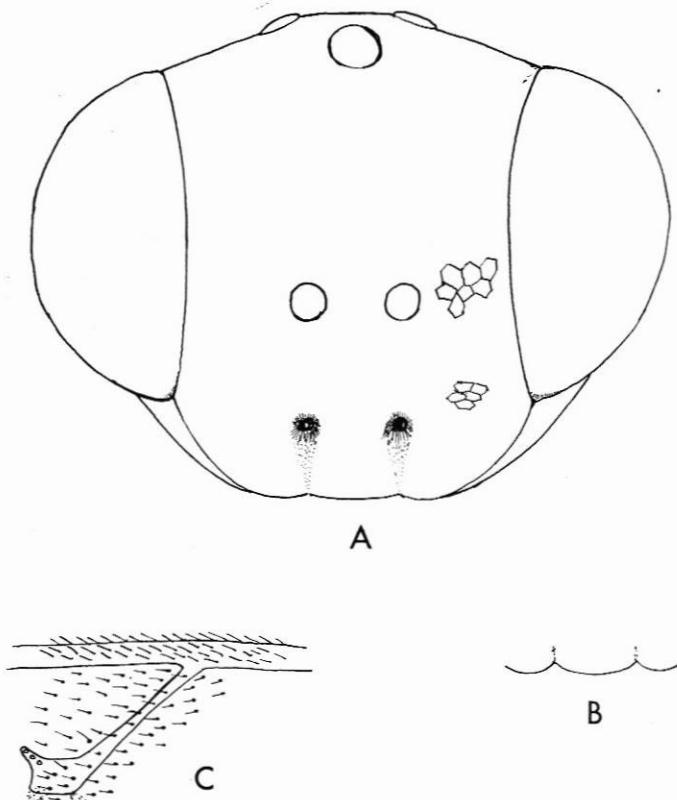


Fig. 12. A. *Janssoniella major* Kerr. head in frontal view, B—C. *J. intermedia* sp.n.  
B. Clypeus (anterior margin) and C. Stigmal vein.

- Propodeum with longer median carina (fig. 13 A) ..... *J. major* Kerr.
- 3. Head seen from above emarginate behind. Costal cell narrow with only a single row of hairs. Weak puncturation on propodeum ..... *J. caudata* Kerr.
- Head seen from above, shallow emarginate. Costal cell less narrow and hairy. Propodeum with strong puncturation ..... *J. intermedia* sp.n.

*Janssoniella notata* Kam.

Kamijo, Insecta Matsum. 23, pp. 101—102, 1960.

Distribution: Japan (Hokkaido).

Host: Unknown.

*Janssoniella major* Kerr. (fig. 12 A, 13 A—C)

Kerrich, Trans. Soc. Brit. Ent. 12, pp. 304—305, 1957.

Distribution: Sweden.

Host: Unknown.

*Janssoniella caudata* Kerr. (fig. 13 D—E)

Kerrich, Trans. Soc. Brit. Ent. 12, p. 305, 1957.

Distribution: Czechoslovakia, England, Germany, Sweden, Canada (B.C.), U.S.A. (N.J.)

Host: Ferrière & Kerrich (1958) "Reared from large tree fungi? associated with *Cis* (Col. Ciidae)".

*Janssoniella intermedia* sp.n.

♀. Blue—black with tint of blue on head, golden green on thorax and a mixture of blue and green basally on gaster. Scapus yellowish brown, distally brownish, the rest of antenna black. Mandibles dark brown. Legs and tegulae yellowish brown, mid and hind coxae with tint of blue. Wing veins brown.

Head wider than thorax. Clypeus (fig. 12 B) with rounded anterior margin. Malar space as long as half breadth of an eye, between tentorial pits and toruli a longitudinal lump. Head and thorax reticulated, strongest on mesoscutum. Propodeum with reticulation equal to mesoscutum, median carina as short as in *J. caudata* Kerr. Gaster elongate, narrow much longer than thorax and head united. Fore wing with costal cell hairy. Postmarginal vein 1 1/2 longer than marginal vein. Stigmal vein (fig. 12 C) more than the half marginal vein. Hind wing: costal vein with incomplete row of hairs.

♂. Unknown.

Length: 6.0—6.5 mm.

Holotype: (coll. mea) Finland, PH. Pylkönmäki, 10.11 1952, leg. Y. Kangas.

Paratypes: 2 ♀♀, 1 ♀ (coll. mea) from the same locality as holotype.

1 ♀ (Canad. Nat. Coll., Ottawa) Canada: Brit. Columbia, Rogson, VIII, 1947, leg. H. R. Foxlee.

*J. intermedia* sp.n. is similar to *J. caudata* Kerr. but differs in having stronger puncturation on propodeum, hairy costal cell in fore wing and posteriorly very shallow emarginated head (head seen from above). *J. intermedia* sp.n. is also similar to *J. major* Kerr. but has shorter median carina of propodeum and a narrow gaster.

*Gastracanthus* Westw.

Westwood, Mag. Nat. Hist. 6, p. 121, 1833.

Synonyms: see Kerrich & Graham (1957).

Type: *G. pulcherrimus* Westw.

4 species known from the Holarctic region.

Key to the species of the genus *Gastracanthus* Westw.

♀♀

1. Fore wing maculate ..... 2.
- . Fore wing immaculate ..... 3.
2. Clypeus with roundly produced anterior margin ..... *G. nigrescens* Kam.
- . Clypeus with anterior margin sinuated ..... *G. pulcherrimus* Westw.
3. Cheek sharply narrowed to mouth. Gaster as long as head and thorax combined ..... *G. japonicus* Kam.

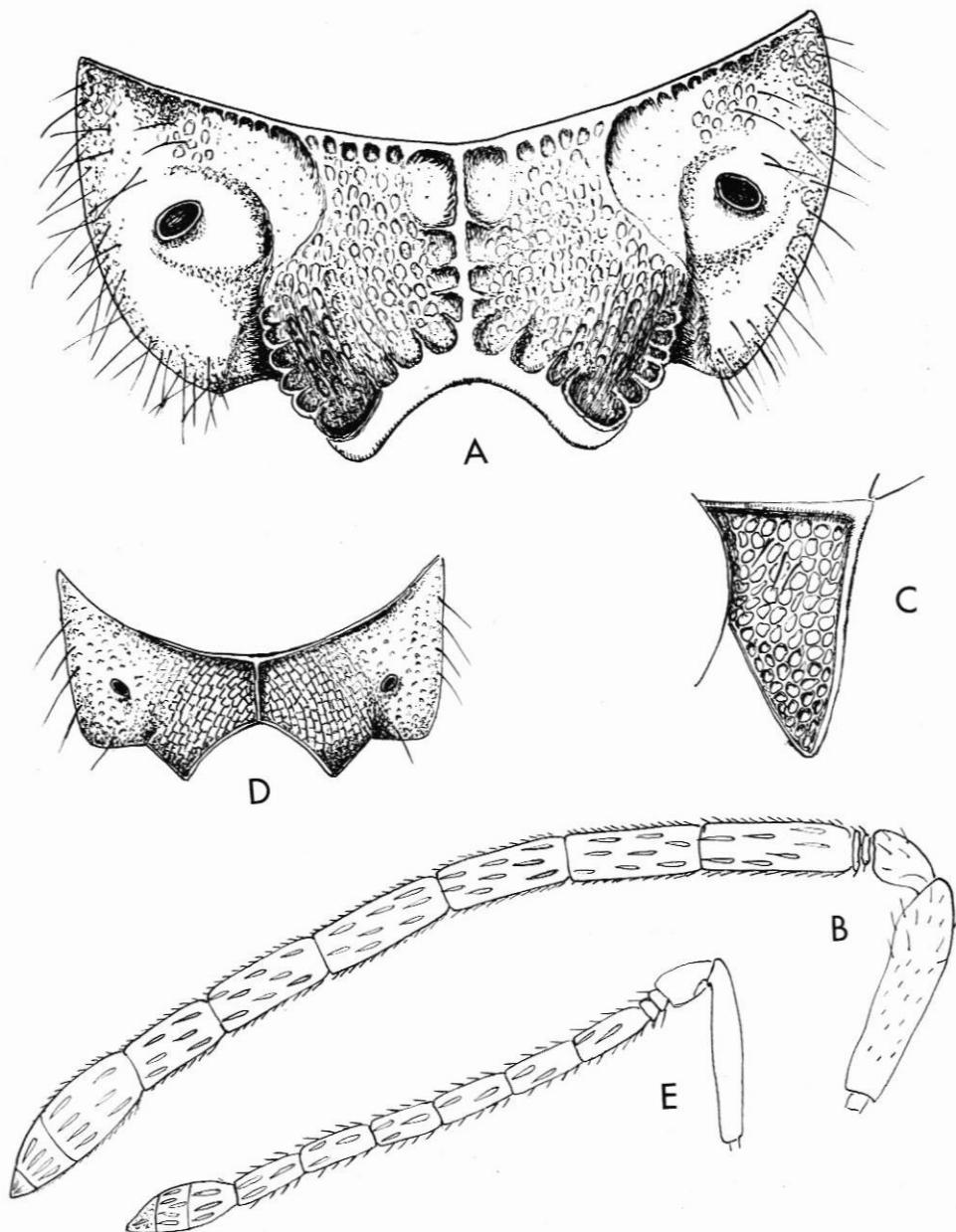


Fig. 13, A—C. *Janssoniella major* Kerr., A. Propodeum, B. Antenna, C. Prepectus, D—E. *J. caudata* Kerr., D. Propodeum and E. Antenna.

*Entomol. Ts. Arg. 89. H. 1—2, 1968*

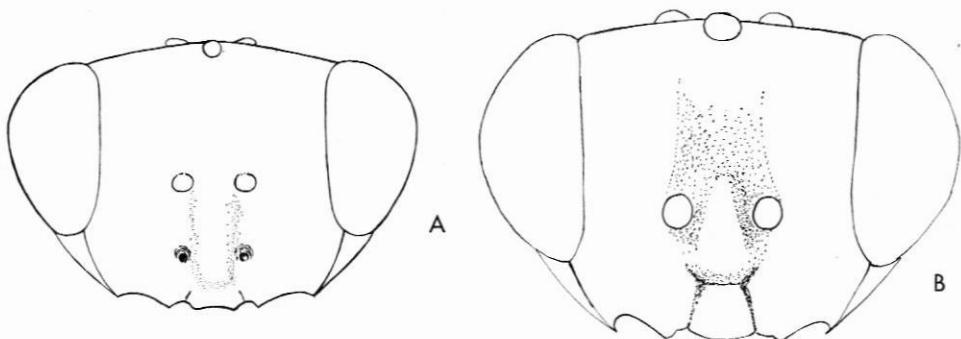


Fig. 14, A. *Gastracanthus pulcherrimus* Westw. head in frontal view and B. *Hebestephus acutus* Kam. head in frontal view.

- Cheek rounded to mouth. Gaster much longer than head and thorax combined ..... *G. conicus* (Girlt.)
- ♂♂
- 1. Clypeus with roundly produced anterior margin ..... *G. nigrescens* Kam.
- Clypeus with anterior margin sinuated or truncate ..... 2.
- 2. Malar space 3 times shorter than the breadth of an eye *G. pulcherrimus* Westw.
- Malar space twice shorter than the breadth of an eye ..... *G. conicus* (Girlt.)

*Gastracanthus nigrescens* Kam.

Kamijo, Insecta Matsum. 23, pp. 103—106, 1960.

Distribution: Japan (Hokkaido).

Host: Unknown.

*Gastracanthus pulcherrimus* Westw. (fig. 14 A, 15 A, B, D)

Westwood, Mag. Nat. Hist. 6, p. 121, 1833.

Synonyms: see Kerrich & Graham (1957).

Distribution: Czechoslovakia, England, Finland, Germany, Sweden, USSR.

Host: Peck et al. (1964) "reported as parasite of mature beetles in genus *Byrrhus*" (Col. Byrrhidae).

*Gastracanthus japonicus* Kam.

Kamijo, Insecta Matsum. 23, pp. 102—103, 1960.

Distribution: Japan (Shikoku).

Host: Unknown.

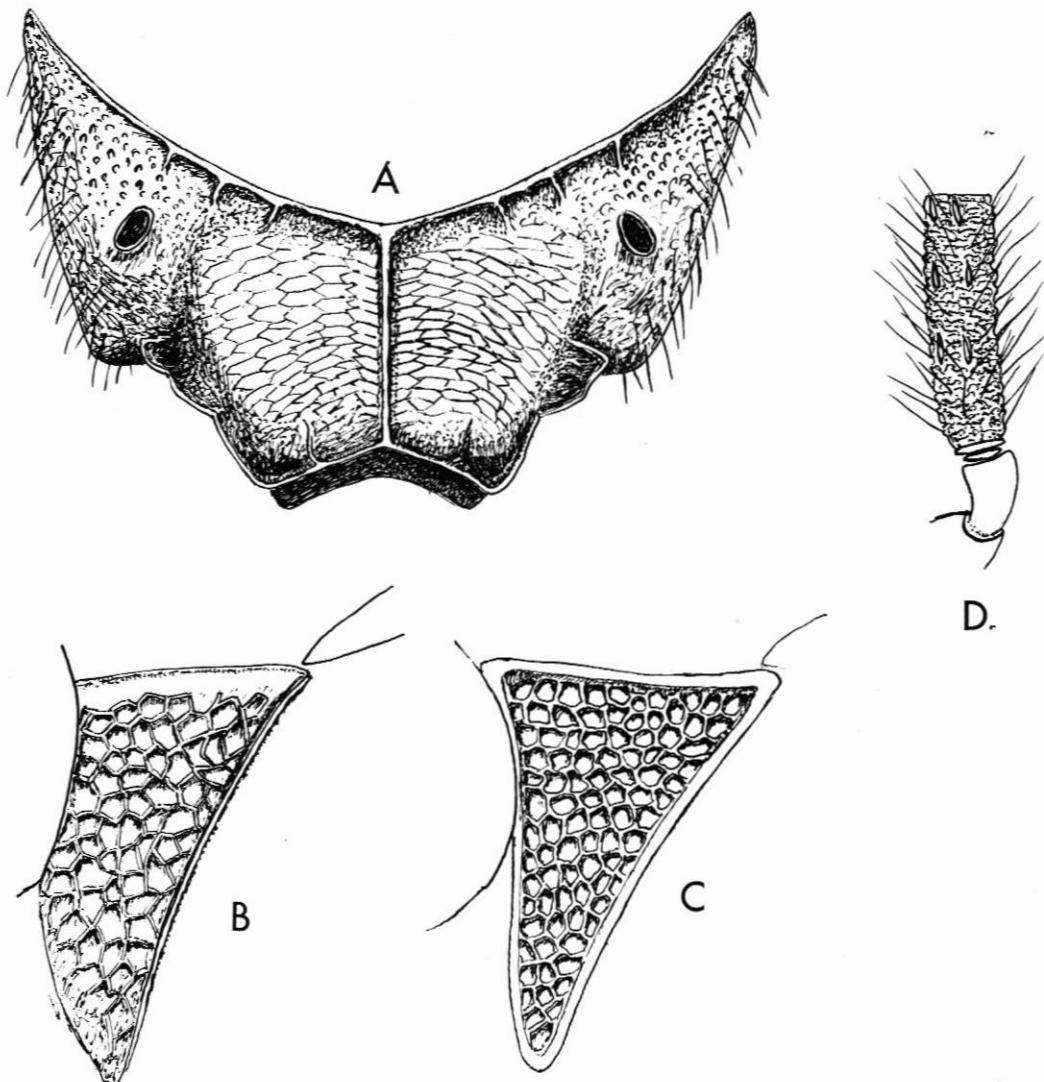


Fig. 15, A, B, D. *Gastracanthus pulcherimus* Westw., A. Propodeum, B. Prepectus,  
D. 1st joint of antenna (male) and C. *Hebestephus acutus* Kam. prepectus.

*Entomol. Ts. Arg. 89. H. 1-2, 1968*

*Gastracanthus conicus* (Girlt.)

Girault, (*Trigonoderus conicus*) Ent. Nes, 28, p. 396, 1917.

Distribution: U.S.A. (Md., N.J., N.Y.), Canada (B.C., Ont., Que.)  
Host: Unknown.

*Hebestephus* Kam.

Kamijo, Insecta Matsum. 23, p. 106, 1960.

Type: *H. acutus* Kam.  
Only one species known.

*Hebestephus acutus* Kam. (fig. 14 B, 15 C)

Kamijo, Insecta Matsum. 23, pp. 106—108, 1960.

Distribution: Japan (Hokkaido).  
Host: Unknown.

Following genera described by Girault are impossible to place without seeing the types.

*Aphotismus* Girlt.

Girault, Trans. R. Soc. S. Austr. 37, p. 101, 1913.

Type: *A. niger* Girlt.  
Probably belonging to *Chalcedectinae*.

*Austrophotismus* Girlt.

Girault, Rev. ent. Rio de J. 8, p. 84, 1938.

Type: *A. ater* Girlt.  
According to the description the genus does not belong to *Trigonoderini*, presumably belonging to *Habrocytus*-group.

*Trigonoderopsis* Girlt.

Girault, Mem. Queensl. Mus. IV, p. 210, 1915.

Type: *T. silvensis* Girlt.  
I can not place this genus without seeing the type.

*Acknowledgments.*

The writer is deeply indebted to the following colleagues, who have placed type material or other material at disposal.

Dr. Z. Bouček, Národní Museum v. Praze, Prague; Prof. L. Brundin, Naturhistoriska Riksmuseet, Stockholm; Dr. B. D. Burks, U.S. Nat. Museum, Washington; Prof. C. H. Lindroth, Universitetets Zoologiska Institution, Lund; Dr. J. F. Perkins, British Museum (Natural History), London; Dr. O. Peck, Entomology Research Institut, Ottawa.

## References

- BOUCEK, Z., 1954, Chalcidologicke Poznámky. I *Pteromalidae, Torymidae, Eurytomidae, Chalcididae* (Hymenoptera). — Acta Ent. Nat. Prague. XXIX, pp. 49—80.  
— 1958, Eine Cleonyminen-Studie. Bestimmungstabelle der Gattungen mit Beschreibungen und Notizen eingeschlossen einige *Eupelmidae* (Hym., Chalcidoidea). — Acta Ent. Mus. Nat. Prague. XXXII, pp. 353—386.
- FERRIERE, CH. and KERRICH, G. J. 1958, in Handbooks for the Identification of British Insects: Hymenoptera. 2 Chalcidoidea, pp. 1—40.
- GRAVES, R. C. 1960, Ecological observation on the insects and other inhabitants of wood shelf fungi (Basidiomycetes: Polyporaceae) in the Chicago area. — Ent. Soc. Amer. Ann. 53, pp. 61—78.
- KERRICH, G. J. and GRAHAM, M. W. R. de V. 1957, Systematic notes on British and Swedish *Cleonymidae* with description of a new genus (Hym., Chalcidoidea). — Trans. Soc. Brit. Ent. 12, pp. 265—311.
- PECK, O. et al. 1964, Keys to the Chalcidoidea of Czechoslovakia (Insecta: Hymenoptera). — Mem. Ent. Soc. Canada, no 34, pp. 1—120.
- SZCZEPANSKI, H., 1961, Chalcid-flies from the genus *Platygerrus* Thoms., parasitizing on bark-beetles, with the description of the species *Pl. millenius* sp.n. (Hymenoptera, Pteromalidae). — Bull. Ent. Pologne. XXXI, pp. 1—11.